

High School TV Studio and Editing Lab Quote

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Technology Integrator 6-12

Presented to the School Board – April 2010

The TV Studio

- The next series of slides will identify specific equipment for a middle/high school TV studio.



http://www.jeff92.org/home_page/TV_Production.html

Hitachi Z4000W Studio Camera (2 needed)



- HITACHI Z4000W USED B-STOCK CAMERA PACKAGE **\$14,600.00 each**
- INCLUDES
 - CA-Z31 CAMERA ADAPTER
 - FUJINON A20X8.6BRM-24 ZOOM LENS
 - RU-Z1 REMOTE CCU (ORIGINAL BOX)
 - GM-51 5" VIEW FINDER (ORIGINAL BOX)
 - AT-30 VIEW FINDER ADAPTER
 - TA-Z3 TRIPOD ADAPTER
 - PORTABRACE CAMERA BAG
 - 28 PIN CAMERA TO CCU CABLE
 - THE CAMERA
 - CCU AND 5" VIEWFINDER COME WITH A 9 MONTH WARRANTY

http://www.hitachikokusai.com/supportingdocs/products/broadcast_prof_products/portable_production/Z4000W_broch1.pdf

Teleprompter (2 needed)



www.bhphotovideo.com

- Autocue/QTV Professional Series 17" Teleprompter –
\$3, 949.95 each
 - **17" monitor medium wide-angle hood**
 - **6' power cable, 82' composite cable**
 - **electronic user manual**
 - **one year warranty against defects in material and workmanship**

Teleprompter Cont'd.



- QStart Prompter Software Package - \$449.95 each

www.bhphotovideo.com

Pedestal Tripods (2 needed)



■ Vinten V3951-0001 Vision Ped Plus Studio Pedestal- Supports up to 66 lb (30 kg) - \$ 4,559.95 each

- Load Capacity
 - 66 lb (30 kg)
- Bowl Diameter/Thread
 - 100 mm bowl
- Steering Ring Diameter
 - 13.8" (35.0 cm)
- Minimum Height
 - 29.6" (75.1 cm)
- Maximum Height
 - 62.8" (159.5 cm)
- Weight
 - 29.7 lb (13.5 kg)
- Warranty
 - 2 Year Warranty
- Dolly
 - Doorway Tracking Width
 - 37.6" (95.6 cm)
- Transit Doorway Width
 - 28.9" (73.3 cm)
- Wheel Diameter
 - 4" (10.0 cm)
- Wheel Lock
 - Yes

www.bhphotovideo.com

Audio Mixing Board



- Peavey PV14 Live Sound Mixer with 14 Channels and Effects Processor - **\$ 299.95 each**

- 14 Input Channels
- 2 Stereo Channels
- 10 RQ Mic Inputs
- Internal Effects Processor

www.bhphotovideo.com

Microphones - Wired



www.bhphotovideo
.com



bhphoto.com

- Astatic CTM-44 Dynamic Handheld Microphone with On/Off Switch – **\$52.50 each** 3 needed
- AKG KM259/5 Extra Low Profile Tripod Mic Stand - **\$79.95 each** 3 needed

Microphones - Wireless



- AmpliVox Sound Systems S1600 VHF Portable Wireless Microphone System with Lavalier Microphone - **\$239.95 each**

www.bhphotovideo.com

Audio Accessories



www.bhphotovideo.com

- Whirlwind Accusonic+2 XLR Male to XLR Female Microphone Cable [6' (1.83 m) - **\$14.95 each**
- 5 needed

Audio Accessories



www.bhphotovideo.com



- Pyle-Pro PPSN811 8-Channel Balanced XLR Male to XLR Female Snake - Length 10' (3.04m) - **\$54.95 each** 5 needed
- 3-pin XLR Male to 3-pin XLR Female Balanced Cable - 15 ft - **\$15.99 each** 5 needed

Lighting



www.bhphotovideo.com

- Altman Micro PAR 50 Watt Tungsten PAR Light - Black (120VAC) - **\$ 93.50 each** 3-6 needed
- Altman 65Q Fresnel Light - **\$ 119.95 each** 2 needed
 - 750 Watt 120VAC
 - Hanging Type 6" Short Throw Lens Color Frame
 - Safety Cable For Theatre Lighting - **\$ 119.95 each** 2 needed

Miscellaneous Stage Equipment

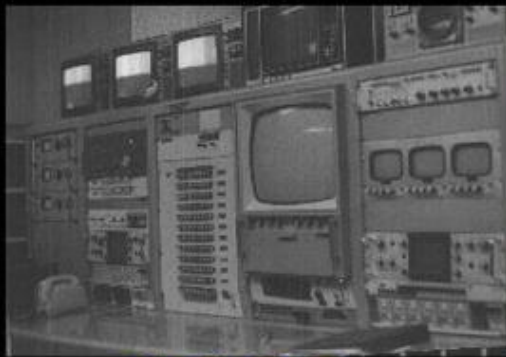


- Budget **\$1000**
- Stage floor
- Chairs
- Table with setting
- Green/blue screen
- News desk
- bookcases

http://www.jeff92.org/home_page/TV_Production.html

The Video Editing Lab

- The next series of slides will identify specific equipment for a middle/high school video editing lab.



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Now

http://www.jeff92.org/home_page/TV_Production.html

New Tech Video Toaster 5 – Integrated Production Suite



<http://www.newtek.com/vt/features.php>

- VT[5]™ Educational Bundle with VT[5]™ and SX-84™ - **\$ 5,995.00 each Live Switching**
 - Internet streaming
 - Titling or Character Generator
 - CG Designer™
 - Digital Disk Recorder (VT-DDR™)
 - External Controller
 - Audio Mixer (using SX-84 expansion box)
 - Signal correction
 - Proc Amp
 - Video Scope
 - Waveform Monitor
 - Video Monitors
 - Non-linear video editing SpeedEDIT™
 - 2D Video painting and animation
 - Aura Video Paint™
 - DVD Authoring U-Lead DVD Workshop
 - INPUT/OUTPUT

Additional Features...

NEWTEK VT[5] HARDWARE SPECIFICATIONS

	VT[5]™
Type	3.3V / 5V half-length 32-bit PCI, 66 MHz
Video In/Out	PAL composite, Component, S-Video, SDI (optional board) alpha channel out
Digital format	8bit ITU-R BT.601
Analogue video connectors	15 pin high density (adapter cable with BNC connectors included)
Time base corrector	Internal. External unit not required
Analogue audio connectors	3,5 mm stereo
Digital video/Audio connector	90-pin digital video/audio bus Firmware Field Upgradable
Genlock	Syncs VT[5] to external sync. Genlock loop-through available on SX-84 subcarrier phase controls: vertical, horizontal
Comb filter	2-line luma and chroma comb filters

RECOMMENDED VT[5] SYSTEM CONFIGURATION*

Processor:	Dual Intel or AMD processor that supports SSE2 Front-side Bus speed of 800MHz or higher
Interface:	A free 66MHz PCI slot for the VT[5] card is recommended for best performance. (Additional slot needed for breakout cable)
Graphics Card:	PCI Express-based graphics card Nvidia or ATI graphics chipset Minimum 64MB per-display onboard graphics RAM Full Open OpenGL and DirectX 9.0 support Minimum screen resolution of 1280x1024 required Latest drivers from chipset manufacturer
System RAM:	2 Gigabytes of System RAM
Hard Drives:	Software-striped SATA drives for video storage/playback 8 GB space for DVEs and content IDE or SATA system drive with 2GB of free disk space DVD Drive
DV Capture and Switching:	Any IEEE1394 Firewire card
Operating System:	Windows® XP Professional (SP2) or Windows® Vista 32-bit
Software:	Windows® Media Player 9 or higher Windows® Media Encoder 9 for streaming
Drivers:	DirectX 9.0c or higher Latest graphics card drivers

For Hi Definition editing, Maximum usage of VT[5] LiveSet™ technology requires a VT PRO card, which shipped with VT[5], dual CPUs or dual dual-core CPUs are suggested for the smoothest and fastest operation.

*NewTek recommends the optimal system configuration. Systems of lesser processor and drive speed will work with VT[5] but some complex functions may not perform in real-time. To review the minimum specifications suitable to your production requirements visit www.newtek.com. Additionally, as new technology becomes available, system recommendations will be updated.

Additional Features...

NEWTEK VT5 OPTIONAL HARDWARE SPECIFICATIONS

SX-84™ SWITCHER EXPANSION MODULE (6U Breakout Box)

Video inputs	8 component or Y/C or 24 composite Proc Amp control for each input (You may have inputs of differing formats on differing rows, so you can have all three formats feeding to the VT[5] at any time.) (Multiple inputs internally synchronized; camera do not require genlock capability.)
Video outputs	4 Component or 4 Y/C program outputs 4 Composite program outputs 1 Alpha out (can also display preview output)
Genlock	1 Genlock in - 1 Genlock loop-through
Audio in	4-Channel XLR balanced (switchable mic or line level, phantom power) - 12 RCA unbalanced (6 stereo pairs) 1 stereo AUX return
Audio out	4 XLR balanced - 8 RCA unbalanced (6 stereo pairs) - 1 stereo AUX send - 2 stereo PA/Control Room Mix
Remote control	3 RS-422 Tally light and GPI support

SX-SDI™ SWITCHER EXPANSION MODULE (2U Breakout Box)

Video inputs	8 Serial Digital inputs
Video outputs	1 Serial Digital Program output 1 Serial Digital Preview output 5 Serial Digital outputs (routed from the 8 SDI inputs)
Audio inputs	1 Embedded Serial Digital audio input 1 AES-EBU Serial Digital audio input
Audio outputs	1 Embedded Serial Digital output 1 AES-EBU Serial Digital output

SDI Video in / out conforms to SMPTE 259M; Embedded Audio conforms to SMPTE 272M; Digital Audio in / out conforms to AES/EBU standards; 20-bit 48khz (2 channels)

Note: The SX-SDI requires the SX-84 to operate. Both SX-84 analog and Serial Digital inputs/outputs are simultaneously active.

SDI I/O EXPANSION CARD

Type	3/4-length PCI card (requires free PCI slot)
Video input	1 SMPTE 259M Serial Digital
Video output	1 SMPTE 259M Serial Digital 1 SMPTE 259M Serial Digital Preview or Alpha Channel out
Audio input	1 AES/EB Serial Digital
Audio output	1 AES/EB Serial Digital

Note: The SDI I/O EXPANSION CARD is not compatible for use with the SX-SDI

Monitors



www.bhphotovideo.com

- Coby TFTV2224 22" Widescreen LCD HD TV/Monitor - **\$200.69 each** 2 needed
 - Resolution: 1680 x 1050
 - ATSC/QAM/NTSC tuner
 - 1x HDMI Built-in Stereo Speakers
 - Closed-Caption

Pro DVD Player

■ Pioneer DVD-V8000 -
\$999.00 each



www.pioneer.com

Mini DV/S-VHS Recorder

- JVC SR-VS30U VS30
BRAND NEW SVHS
MINI DV DUBBING
VCR - **\$1800.00 each**



http://www0.epinions.com/prices/pr-JVC_HR-DVS3_Mini_DV_S-VHS_VCR

Computers



www.store.apple.com

- Apple iMac - **\$1700 each**
3-5 needed
 - **27-inch: 3.06GHz**
 - 3.06GHz Intel Core 2 Duo
 - 2560 x 1440 resolution
 - 4GB memory
 - 1TB hard drive1
 - 8x double-layer SuperDrive
- ATI Radeon HD 4670 graphics with 256MB

Video Editing Software



www.bhphotovideo.com

- Apple Final Cut Express 4 Video Editing Software for Mac OS X - **\$157.99 each** 3-5 needed

Miscellaneous Equipment



- Budget **\$1000**
- Wires, cables, and racks
- Professional development
- Maintenance

http://www.saville-av-online.com/images/category_images/1177578013.4957_45.jpg

Total Cost for TV Studio/Video Editing Lab for High School Students

- \$49, 313 for TV studio and video editing lab
 - With one digital TV camera
- \$62, 913 for TV studio and video editing lab
 - With two digital TV cameras

One-time investment with routine upgrades and maintenance every two, five, and 10 years.

Prepared by Xaras Collins-Brown

- For:
 - GRIT 541 Video Communications
 - Prof Pat Walder
 - Spring 2010